Appendix B

Quality Indicators for Assistive Technology
(QIAT)
QIAT Self Evaluation Matrices

QUALITY INDICATORS
FOR ASSISTIVE TECHNOLOGY SERVICES

The QIAT Consortium

The consideration of assistive technology devices and services is required during the development of every Individualized Educational Program (IEP) and every Individual Family Service Plan (IFSP) for children from birth to school age. The Individuals with Disabilities Education Act of 1997 (IDEA '97) requires that each team that plans for the education of a child with a disability document any assistive technology devices and/or services the child may need. Despite this requirement, there has been no agreed upon description of high quality assistive technology services by which schools can measure their compliance.

Since the summer of 1998, the Quality Indicators for Assistive Technology (QIAT) Consortium has focused its efforts on defining a set of descriptors that could serve as over-arching guidelines for quality assistive technology services. The Consortium has attempted to develop descriptors that are applicable regardless of service delivery models. It is the belief of the Consortium that these descriptors can be used to guide:

1. school districts in the development and provision of quality assistive technology services which are aligned to federal, state and local mandates;
2. assistive technology service providers in the evaluation and improvement of their services;
3. consumers of assistive technology services in the selection of adequate assistive technology services;
4. university faculty and professional development providers in the delivery of programs that develop knowledge and skills needed to offer quality assistive technology services;
5. leaders in the development of regulations and policies related to the use of assistive technology in education.

When reviewing or using the Quality Indicators for Assistive Technology, it is important to be aware of some basic assumptions that pertain to all areas of QIAT. First, it is essential that ALL assistive technology services developed and delivered by states or districts are legally correct according to the mandates and expectations of federal and state laws and are aligned to district policies. Second, assistive technology efforts, at all stages, involves on-going collaborative work by teams which include families and caregivers, school personnel, and other needed individuals and service agencies. Third multidisciplinary team members involved in assistive technology processes are responsible for following the code of ethics for their specific profession.

Note: IDEA '97 requires that assistive technology devices and services be provided for all children with disabilities who need them. This applies to children from birth to twenty-one years of age. In the following document, when the term IEP is used, the reader can assume that the indicator also applies to IFSPs unless otherwise indicated.

Quality Indicators for Administrative Support

This area defines the critical areas of administrative support and leadership for developing and delivering assistive technology services. It involves the development of policies, procedures, and other supports necessary to sustain effective assistive technology programs.

1. **The education agency has written procedural guidelines that ensure equitable access to assistive technology devices and services for students with disabilities, if required for FAPE.**

   Intent: The education agency has clear written procedural guidelines that provide equal access to assistive technology devices and services for all students. Access to AT is the same for the student regardless of abilities, economic status or geographic location. All district personnel are familiar with the procedural guidelines.

2. **The education agency has clearly defined and broadly disseminated policies and procedures for providing effective assistive technology devices and services.**

   Intent: District personnel in special education and general education are familiar with the policies and procedures in both special education as well as general education. The procedures are readily available at each campus and all school personnel know how to access the procedures.

3. **The education agency has written descriptions of job requirements, which include knowledge, skills, and responsibilities for staff members who provide assistive technology services.**

   Intent: The education agency has clear written statements of job requirements that address the necessary AT knowledge, skills and responsibilities for all staff members. This includes all personnel from the classroom through central office. This could be reflected in a position description, assignment of duty statement or some other written description.

4. **The education agency employs a range of personnel with competencies needed to provide quality assistive technology services within their areas of primary responsibility.**

   Intent: The agency employs staff members from the classroom through the central office who have knowledge and skills of AT commensurate with job requirements. Though classroom teachers, supervisors and purchasing agents may need different knowledge and skills related to assistive technology, all must be knowledgeable for the system to work well.

5. **The education agency includes assistive technology in the technology planning and budgeting process.**

   Intent: Historically, the AT needs of the agency have either been separate or omitted. A comprehensive technology plan provides for the technology needs of all students in both general education as well as special education.

6. **The education agency provides continuous learning opportunities about assistive technology devices, strategies and resources for staff, family and students.**

   Intent: The training addresses the needs of the student, the family, and all of the staff involved with the student. Ongoing training and technical assistance opportunities are readily accessible to all members of the IEP team. The training and technical assistance includes training on AT devices, strategies and resources to support IEP goals and objectives.

7. **The education agency uses a systematic procedure to evaluate the components of assistive technology services to ensure accountability for student progress.**

   Intent: There is a clear systematic procedure with which all administrators are familiar and use regularly. This procedure is used consistently across the agency at both central office and the building level. The components of this process include budgeting, planning, delivery and evaluation of AT services.

COMMON ERRORS:

1. If policies and guidelines are developed, they are not known widely enough to assure equitable application by all IEP teams.

2. It is not clearly understood that the primary purpose of assistive technology in school settings is to support the implementation of the IEP for the provision of a free appropriate public education (FAPE).

3. Personnel have been appointed to head assistive technology efforts, but resources to support those efforts have not been allocated. (Time, a budget for devices, professional development, etc.)

4. Assistive technology leadership personnel try to or are expected to do all of the assistive technology work and fail to meet expectations.

5. Assistive technology services are established but their effectiveness is never evaluated.

Quality Indicators for Consideration of Assistive Technology Needs

Consideration of the need for assistive technology devices and services is an integral part of the educational process identified by IDEA '97 for referral, evaluation, and IEP development. Although assistive technology is considered at all stages of the process, the Consideration Quality Indictors are specific to the consideration of assistive technology in the development of the IEP as mandated by IDEA '97. In most instances, the Quality Indicators are also appropriate for the consideration of assistive technology for students who qualify for services under other legislation (e.g. 504, ADA).

1. **Assistive technology devices and services are considered for all students with disabilities regardless of type or severity of disability.**

   Intent: IDEA '97 is based on a child-centered process. Decisions regarding the need for assistive technology are determined by the unique educational needs of each individual student. Services cannot be determined based on categories.

2. **The IEP team has the knowledge and skills to make informed assistive technology decisions.**

   Intent: The IEP team members collectively use their skills to recommend assistive technology devices and services needed to remove barriers to student performance. When the assistive technology needs are beyond the knowledge and scope of the IEP team, additional support from other resources is sought.

3. **The IEP team uses a collaborative decision making process based on data about the student environment and tasks to determine assistive technology needs.**

   Intent: Although IDEA requires that the AT needs of students be considered during the development of the IEP, it does not specify a process. The IEP team uses a state or district determined process to make informed decisions regarding the need for assistive technology. The process is communicated and used consistently across the district.

4. **A continuum of assistive technology devices and services is explored.**

   Intent: The IEP team considers a range of tools and strategies, including no tech, low tech and high tech to meet the educational needs of the student. Consideration is not limited to the devices and services currently available within the district.

5. **Decisions regarding the need for assistive technology devices and services are made based on access to the curriculum and the student's IEP goals and objectives.**

   Intent: After the IEP team determines the curricular tasks the student needs to complete and develops the goals and objectives, the team considers whether assistive technology is required to accomplish those tasks.

6. **Decisions regarding the need for assistive technology devices and services and supporting data are documented**

   Intent: The IEP team determines whether or not assistive technology devices and/or services are needed. The IEP team uses something more than a check box to document the basis of the decision.

COMMON ERRORS:

1. Assistive technology is considered for students with severe disabilities only.

2. No one on the IEP team is knowledgeable regarding assistive technology.

3. Team does not use a consistent process based on data about the student, environment and tasks to make decisions.

4. Consideration of assistive technology is limited to those items that are familiar to team members or are available in the district.

5. Team members fail to consider access to the curriculum and IEP goals in determining if assistive technology is required in order for the student to receive FAPE.

6. If assistive technology is not needed, team fails to document the basis of its decisions.

Quality Indicators for Assessment of Assistive Technology Needs

Quality Indicators for Assessment of Assistive Technology Needs is a process conducted by a team, used to identify tools and strategies to address a student's specific need(s). The issues that lead to an assistive technology assessment may be very simple and quickly answered or more complex and challenging. Assessment takes place when these issues are beyond the scope of the problem solving that occurs as a part of normal service delivery.

1. **Assistive technology assessment procedures are clearly defined and consistently used.**

   Intent: Throughout the educational agency, personnel are well informed and trained about assessment procedures and how to initiate them. There is consistency throughout the agency in the conducting of assistive technology assessments.

2. **Assistive technology assessments are conducted by a multidisciplinary team that actively involves the student and family or caregivers.**

   Intent: The multidisciplinary team conducting an assistive technology assessment is comprised of people who collectively have knowledge about the abilities and needs of the student, the demands of the customary environments, the educational objectives, and assistive technology. Various team members bring different information and strengths to the assessment process.

3. **Assistive technology assessments are conducted in the student's customary environments.**

   Intent: The assessment process takes place in customary environments (e.g., classroom, lunchroom, home, playground, etc.) because of the varied characteristics and demands in those environments. In each environment, district personnel, the student and family or caregivers are involved in gathering specific data and relevant information.

4. **Assistive technology assessments, including needed trials, are completed within reasonable time lines.**

   Intent: Assessments are initiated in a timely fashion and completed within a time line that is reasonable as determined by the IEP team. The timeline complies with applicable state and agency requirements.

5. **Recommendations from assistive technology assessments are based on data about the student, environments and tasks.**

   Intent: The assessment includes information about the student's needs and abilities, demands of the environments, and educational tasks and objectives. It may include trial use of the technology in the environments in which it will be used.

6. **The assessment provides the IEP team with documented recommendations about assistive technology devices and services.**

   Intent: The recommendations from the assessment are clear and concise so that the IEP team can use them in decision-making and program development.

7. **Assistive technology needs are reassessed by request or as needed based on changes in the student, environments and/or tasks.**

   Intent: An assistive technology assessment is available any time it is needed due to such changes or when it is requested by the parent or other members of the IEP team.

COMMON ERRORS

1. Procedures for conducting assistive technology assessment are not defined, or are not customized to meet the student's needs.

2. A team approach to assessment is not utilized.

3. Individuals participating in an assessment do not have the skills necessary to conduct the assessment, and do not seek additional help.

4. Team members do not have adequate time to conduct assessment processes, including necessary trials with AT.

5. Communication between team members is not clear.

6. The student is not involved in the assessment process.

7. When the assessment is conducted by any team other than the student's IEP team, the needs of the student or expectations for the assessment are not communicated.

Quality Indicators for Documentation in the IEP

The Individuals with Disabilities education Act of 1997 (IDEA '97) requires that the IEP team consider assistive technology needs in the development of every Individualized Education Program (IEP). Once the IEP team has reviewed assessment results and determined that assistive technology is needed for provision of FAPE, it is important that the IEP document reflects the team's determination in as clear a fashion as possible. The Quality Indicators for Assistive Technology in the IEP help the team to describe the role of assistive technology in the child's educational program.

1. **The education agency has guidelines for documenting assistive technology needs in the IEP and everyone on the IEP team is aware of them.**

   Intent: Education agencies give instructions to IEP teams as to how IEPs should be written. These instructions include guidance about documentation of assistive technology needs. Districts give direction to IEP teams about how to document assistive technology as a related service, supplementary aid or service, goal, objective etc.

2. **Assistive technology is included in the IEP in a manner that provides a clear and complete description of the devices and services to be provided and used.**

   Intent: IEPs are written in such a manner that everyone who attended the IEP meeting and other people who might need to use the information to implement the plan understand what is to be done. IEPs are clearly written with as little "jargon" as possible. They give a clear picture of the devices and services which the IEP team determined were necessary.

3. **Assistive technology is used as a tool to support achievement of IEP goals and objectives as well as participation and progress in the general curriculum.**

   Intent: There should be a clear relationship between assistive technology devices and services included in an IEP and the goals and objectives developed by the team. Most goals and objectives should be developed before decisions about assistive technology use are made.

4. **IEP content regarding assistive technology use is written in language that describes measurable and observable outcomes.**

   Intent: At the point of periodic review, the IEP is used to measure whether the district met its commitments and the whether the educational goals set for the child were appropriate. Content, which describes measurable and observable outcomes for assistive technology allows the team to review the success of the plan.

5. **All services needed to implement assistive technology use are documented in the IEP.**

   Intent: IDEA lists a variety of services (i.e. evaluating, customizing, maintaining, coordinating services, training for the child and family, technical assistance for professionals) that must be provided to support the child's use of an assistive technology device. IEPs that include assistive technology devices often fail because inadequate services are provided. It is important that the IEP includes services as well as devices.

COMMON ERRORS:

1. IEP teams do not know how to include assistive technology in IEPs.
2. IEPs including assistive technology use a "formula" approach to documentation. All IEPs are developed in similar fashion and the unique needs of the child are not addressed.
3. Assistive technology is included in the IEP, but the relationship to goals and objectives is unclear.
4. Assistive technology devices are included in the IEP, but no assistive technology services support the use.
5. Assistive technology expected results are not measurable or observable.

Quality Indicators for Assistive Technology Implementation

Assistive technology implementation pertains to the ways that assistive technology devices and services, as included in the IEP (including goals/objectives, related services, supplementary aids and services and accommodations or modifications) are delivered and integrated into the student's educational program. Assistive technology implementation involves people working together to support the student using assistive technology to accomplish expected tasks necessary for active participation in customary educational environments.

1. **Assistive technology implementation proceeds according to a collaboratively developed plan.**

   Intent: Following IEP development, all those involved in implementation work together to develop a written action plan that provides detailed information about how the assistive technology will be used in specific educational settings, what will be done and who will do it.

2. **Assistive technology is integrated into the curriculum and daily activities of the student.**

   Intent: Assistive Technology is used when and where needed to facilitate the student's access to the curriculum, and active participation in educational activities and routines.

3. **Team members in all of the child's environments share responsibility for implementation of the plan.**

   Intent: Persons working with the student in each environment know what to do to support the student using assistive technology.

4. **The student uses multiple strategies to accomplish tasks and the use of assistive technology may be included in those strategies.**

   Intent: Assistive Technology tools are used when needed to remove barriers to participation and/or performance. Alternate strategies may include use of the student's natural abilities, other supports, or modifications to the curriculum, task or environment. At times these alternate strategies may be more efficient than the use of assistive technology.

5. **Training for student, family and staff is an integral part of implementation.**

   Intent: Determination the training needs of the student, staff and family based on how the assistive technology will be used in each unique environment. Training and technical assistance are planned and implemented as ongoing processes based on current and changing needs.

6. **Assistive technology implementation is initially based on assessment data and is adjusted based on performance data.**

   Intent: Formal and informal assessment data guide initial decision-making and planning for Assistive Technology implementation. As the plan is carried out, student performance is monitored and implementation is adjusted in a timely manner to support student progress.

7. **Assistive technology implementation includes management and maintenance of equipment and materials.**

Intent: For technology to be useful it is important that equipment management responsibilities are clearly defined and assigned. Though specifics may differ based on the technology, some general areas may include organization of equipment and materials, responsibility for acquisition, repair and replacement, and assurance that equipment is operational.

COMMON ERRORS

1. Implementation is expected to be smooth and effective without addressing specific components in a plan. Team members assume that everyone understands what needs to happen and knows what to do.

2. Plans for implementation are created and carried out by one IEP team member.

3. The team focuses on device acquisition and does not discuss implementation.

4. An implementation plan is developed that is incompatible with the instructional environments.

5. No one takes responsibility for the care and maintenance of assistive technology devices and so they are not available or in working order when needed.

6. Contingency plans for dealing with broken or lost devices are not made in advance.

Quality Indicators for Evaluation of Effectiveness

This area addresses the evaluation of the effectiveness of the assistive technology devices and services be provided. It includes data collection and documentation to monitor changes in student performance resulting from the implementation. Student performance is reviewed in order to identify if, when, or where modifications and revisions to the implementation are needed.

1. **Team members share clearly defined responsibilities to ensure that data are collected, evaluated, and interpreted by capable and credible team members.**

   Intent: Each team member is accountable for ensuring that the data collection process determined by the team is implemented. Individual roles in the collection and review of the data are assigned by the team. Data collection, evaluation, and interpretation are lead by persons with relevant training and knowledge. It can be appropriate for different individual team members to conduct these tasks.

2. **Data are collected on specific student behaviors that have been identified by the team and are related to one or more goal.**

   Intent: In order to evaluate the success of the assistive technology use, data is collected on various aspects student performance. The behavior targeted for data collection is related to one or more IEP goal (s) (e.g. ability to accomplish the task, use of the technology, changes in student behavior).

3. **Evaluation of effectiveness reflects the objective measurement of changes in the student's performance (e.g. student preferences, productivity, participation, independence, quantity, quality, speed, accuracy, frequency, or spontaneity).**

   Intent: Expected changes in student performance are determined by the IEP team. The behavior targeted for data collection must be observable and measurable. Data which captures changes in student behaviors may be either quantitative, qualitative, or both.

4. **Effectiveness is evaluated across environments including during naturally occurring opportunities as well as structured activities.**

   Intent: The team determines the environments where the changes in student performance are expected to occur and prioritizes appropriate activities for data collection in those environments.

5. Evaluation of effectiveness is a dynamic, responsive, ongoing process that is reviewed periodically.

Intent: Scheduled data collection occurs over time and changes in response to both expected and unexpected results. Data collection reflects measurement strategies appropriate to individual student's needs. Team members evaluate and interpret data during periodic progress reviews.

6. Data collected provides a means to analyze response patterns and student performance.

Intent: The team regularly analyzes data to determine student progress and error patterns.

7. The team makes changes in the student's educational program based on data.

Intent: During the process of reviewing data, the team determines whether program changes/modifications need to be made in the environment, tasks, and tools. The team acts on these decisions and makes needed changes.

COMMON ERRORS:

1. An observable, measurable student behavior is not specified as a target for change.
2. Team members do not share responsibility for evaluation of effectiveness.
3. An environmentally appropriate means of data collection and strategies has not been identified.
4. A schedule of program review for possible modification is not determined before implementation begins.

Quality Indicators for Assistive Technology Transition (NEW AREA, 2003)

Transition for assistive technology users addresses the ways that a student's use of assistive technology devices and services is transferred from one setting to another. Assistive technology transition involves people from different classrooms, programs, buildings, or agencies working together to ensure continuity in the student's assistive technology use and thereby avoid a loss of skill, independence and/or function. It is critical that all participants in transition planning recognize that the student is the only one who does not change during the transition process.

1. **Transition plans address assistive technology needs of the student, including: roles and training needs of team members; subsequent steps in assistive technology use; and follow-up after transition takes place.**

   Intent: The transition plan assists the receiving agency/team to successfully provide needed supports for the AT user. This involves the assignment of responsibilities and the establishment of accountability.

2. **Transition planning for students using assistive technology empowers the student to participate at a level appropriate to age and ability.**

   Intent: Specific self determination skills are taught that enable the student to gradually assume responsibility for participation and leadership in AT transition planning as capacity develops. Assistive technology tools are provided, as needed, to support the student's participation.

3. **Advocacy related to assistive technology use is recognized as critical and planned for by the teams involved in transition.**

   Intent: Everyone involved in transition advocates for the student's progress, including the student's use of assistive technology. Specific advocacy tasks related to AT use are addressed and may be carried out by the student, the family, staff members or a representative.

4. **Needs related to using assistive technology in the receiving environment are determined during the transition planning process.**

   Intent: Environmental requirements, skill demands and needed AT support are determined in order to plan appropriately. This determination is made collaboratively and with active participation by representatives from sending and receiving environments.

5. **Transition planning for students using assistive technology proceeds according to a timeline based on the complexity of student's needs.**

   Intent: Transition planning timelines are adjusted based on specific needs of the student and differences in environments. Complexity of AT needs and issues will affect time required for planning and transition activities therefore, transition planning for students who use AT may need to start sooner.

6. The transition team addresses specific equipment and funding issues such as transfer or acquisition of assistive technology, needed manuals and support documents.

Intent: A plan is developed to ensure that the AT equipment, hardware, and/or software arrives in working condition accompanied by any needed manuals. Provisions for ongoing maintenance and technical support are included in the plan.

COMMON ERRORS:

CURRENTLY UNDER DEVELOPMENT (August, 2003)

Quality Indicators for Professional Development and Training in Assistive Technology (NEW AREA, 2003)

This area defines the critical elements of quality professional development and training in assistive technology. Assistive technology professional development and training efforts should arise out of an ongoing, well-defined, sequential and comprehensive plan. Such a plan can develop and maintain the abilities of individuals at all levels of the organization to participate in the creation and provision of quality AT services. The goal of assistive technology professional development and training is to increase educators' knowledge and skills in a variety of areas including, but not limited to: collaborative processes; a continuum of tools, strategies, and services; resource; legal issues; action planning; and data collection and analysis. Audiences for professional development and training include: students, parents or caregivers, special education teachers, educational assistants, support personnel, general education personnel, administrators, AT specialists, and others involved with students.

1. **Comprehensive assistive technology professional development and training support the understanding that assistive technology devices and services enable students to accomplish IEP goals and objectives and make progress in the general curriculum.**

   Intent: The Individuals with Disabilities Education Act (IDEA) requires the provision of a free and appropriate public education (FAPE) for all children with disabilities. The Individualized Education Plan (IEP) defines FAPE for each student. The use of AT enables students to participate in and benefit from FAPE. The focus of all AT Professional Development and training activities is to increase the student's ability to make progress in the general curriculum and accomplish IEP goals and objectives.

2. **The education agency has an AT professional development and training plan that identifies the audiences, the purposes, the activities, the expected results, evaluation measures and funding for assistive technology professional development and training.**

   Intent: The opportunity to learn the appropriate techniques and strategies is provided for each person involved in the delivery of assistive technology services. Professional development and training are offered at a variety of levels of expertise and are pertinent to individual roles.

3. **The content of comprehensive AT professional development and training addresses all aspects of the selection, acquisition and use of assistive technology.**

   Intent: AT professional development and training address the development of a wide range of assessment, collaboration and implementation skills that enable educators to provide effective AT interventions for students. The AT professional development and training plan includes, but is not limited to: collaborative processes; the continuum of tools, strategies and services; resources; legal issues; action planning; and data collection.

4. **AT professional development and training address and are aligned with other local, state and national professional development initiatives.**

   Intent: Many of the effective practices used in the education of children with disabilities can be enhanced by the use of assistive technology. The functional use of AT is infused into all professional development efforts.

5. **Assistive technology professional development and training include ongoing learning opportunities that utilize local, regional, and/or national resources.**

   Intent: Professional development and training opportunities enable individuals to meet present needs and increase their knowledge of AT for use in future. Training in AT occurs frequently enough to address new and emerging technologies and practices and is available on a repetitive and continuous schedule. A variety of AT professional development and training resources are used.

6. **Professional Development and Training in assistive technology follow research-based models for adult learning that include multiple formats and are delivered at multiple skill levels.**

   Intent: The design of Professional Development and Training for AT recognizes adults as diverse learners who bring various levels of prior knowledge and experience to the training and can benefit from differentiated instruction using a variety of formats and diverse timeframes (e.g., workshops, distance learning, follow-up assistance, ongoing technical support).

7. **The effectiveness of assistive technology professional development and training is evaluated by measuring changes in practice that result in improved student performance.**

   Intent: Evidence is collected regarding the results of AT professional development and training. The professional development and training plan is modified based on these data in order to ensure changes educational practice that result in improved student performance.

COMMON ERRORS:

CURRENTLY UNDER DEVELOPMENT (August, 2003)

Introduction to The QIAT Self-Evaluation Matrices

By Joy Smiley Zabala and Diana F. Carl (excerpted from work in press)

The QIAT Self-Evaluation Matrices (QILT, 2001) were developed in response to formative evaluation data indicating a need for a model that could assist in the application of the Quality Indicators for Assistive Technology Services in Schools (Zabala, et. al, 2000). The QIAT Matrices are based on the idea that change does not happen immediately, but rather, moves toward the ideal in a series of steps that take place over time. The QIAT Matrices use the Innovation Configuration Matrix (ICM) developed by Hall and Hord (1985) as a structural model. The ICM provides descriptive steps ranging from the unacceptable to the ideal, that can be used as benchmarks to determine the current status of practice related to a specific goal or objective and guide continuous improvement toward the ideal. It enables users to determine areas of strength that can be built upon as well as areas of challenge in need of improvement.

When the QIAT Matrices are used to guide a collaborative self-assessment conducted by a diverse group of stakeholders within an agency, the information gained can be used to plan for changes that lead to improvement throughout the organization in manageable and attainable steps. The QIAT Matrices can also be used to evaluate the level to which expected or planned-for changes have taken place by periodically analyzing changes in service delivery over time.

When completed by an individual or team, the results of the self-assessment can be used to measure areas of strength and plan for needed professional development, training, or support needed by the individual or team. When the QIAT Matrices are used by an individual or team, however, it is important to realize that the results can only reasonably reflect perceptions of the services in which that individual or team is involved and may not reflect the typical services within the organization. Since a primary goal of QIAT is to increase the quality and consistency of assistive technology services to <u>all</u> students throughout the organization, the perception that an individual or small group is working at the level of best practices may still indicate a need to increase the quality and consistency of services throughout the organization.

The descriptive steps included in the QIAT Matrices are meant to provide illustrative examples and may not be specifically appropriate, as written, for all environments. People using the QIAT Matrices may wish to revise the descriptive steps to align them more to closely for specific environments. However, when doing this, care must be taken that the revised steps do not compromise the intent of the quality indictor to which they apply.

References

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Quality Indicators in Assistive Technology
Indicators in Action Matrix
Administrative Support

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. The education agency has written procedural guidelines that ensure equitable access to assistive technology devices and services for students with disabilities, if required by FAPE.	(1) No written procedural guidelines are in place.	(2) Written procedural guidelines for few components of AT service delivery are in place. (i.e. assessment or consideration)	(3) Written procedural guidelines that address several components of AT service delivery are in place.	(4) Written procedural guidelines that address most components of AT service delivery are in place.	(5) Comprehensive written procedural guidelines that address all components of AT service delivery are in place.
2. The education agency has clearly defined and broadly disseminated policies and procedures for providing effective assistive technology devices and services.	(1) No policies or procedures disseminated and no plan to disseminate.	(2) A plan for dissemination exists, but has not been implemented.	(3) Procedures are disseminated to a few staff who work directly with AT.	(4) Procedures are disseminated to most agency personnel and generally used.	(5) Procedures are disseminated to all agency personnel and consistently used.
3. The education agency has written descriptions of job requirements, which include knowledge, skills, and responsibilities for staff members who provide assistive technology services.	(1) No job requirements relating to AT are written.	(2) Job requirements related to AT are written only for a few specific personnel who provide AT services.	(3) Job requirements related to AT are written for most personnel who provide AT services but are not clearly aligned to job responsibilities.	(4) Job requirements related to AT are written for most personnel who provide AT services and are generally aligned to job responsibilities.	(5) Job requirements related to AT are written for all personnel who provide AT services and are clearly aligned to job responsibilities.
4. The education agency employs a range of personnel with competencies needed to provide quality assistive technology services within their areas of primary responsibility.	(1) AT competencies are not considered in hiring, assigning or evaluating personnel.	(2) AT competencies are recognized as an added value in an employee, but are not sought.	(3) AT competencies are recognized and sought for specific personnel.	1. AT competencies are generally valued and used in hiring, assigning and evaluating personnel.	(5) AT competencies are consistently valued and used in hiring, assigning and evaluating personnel.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Administrative Support

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
5. The education agency includes assistive technology in the technology planning and budgeting process.	(1) There is no planning and budgeting process for AT.	(2) AT planning and budgeting is a special education function that is not included in the agency-wide technology planning and budgeting process.	(3) AT is sometimes included in the agency-wide technology planning and budgeting process, but is inadequate to meet AT needs throughout the agency.	(4) AT is generally included in agency-wide technology planning and budgeting process in a way that meets most AT needs throughout the agency.	(5) AT is included in the agency-wide technology planning and budgeting process in way that meets AT needs throughout the agency.
6. The education agency provides continuous learning opportunities about assistive technology devices, strategies, and resources for staff, family students.	(1) No learning opportunities related to AT are provided.	(2) Learning opportunities related to AT are provided on a crisis-basis only. Learning opportunities may not be available to all who need them.	(3) Learning opportunities related to AT are provided to some individuals on a pre-defined schedule.	(4) Learning opportunities related to AT are provided on a pre-defined schedule to most individuals with some follow-up opportunities.	(5) Learning opportunities related to AT are provided on an on-going basis to address the changing needs of students with disabilities, their families and the staff who serve them.
7. The education agency uses a systematic procedure to evaluate the components of assistive technology services to ensure accountability for student progress.	(1) AT services are not evaluated.	(2) Varying procedures are used to evaluate some AT services. Procedures may or may not be based on student progress.	(3) A systematic procedure, sometimes linked to student progress, is inconsistently used to evaluate AT services.	(4) A systematic procedure, linked to student progress, is generally used to evaluate AT services.	(5) A systematic procedure, linked to student progress, is consistently used throughout the agency.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Consideration

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. Assistive technology devices and services are considered for all students with disabilities regardless of type or severity of disability.	(1) AT is not considered for students with disabilities.	(2) AT is considered only for students with severe disabilities or students in specific disability categories.	(3) AT is considered for all students with disabilities but the consideration is inconsistently based on the unique educational needs of the student.	(4) AT is considered for all students with disabilities and the consideration is generally based on the unique educational needs of the student.	(5) AT is considered for all students with disabilities and the consideration is consistently based on the unique educational needs of the student.
2. IEP team has the knowledge and skills to make informed assistive technology decisions.	(1) The team does not have the knowledge or skills needed to make informed AT decisions. The team does not seek help when needed.	(2) Individual team members have some of the knowledge and skills needed to make informed AT decisions. The team does not seek help when needed.	(3) Team members sometimes combine knowledge and skills to make informed AT decisions. The team does not always seek help when needed.	(4) Team members generally combine their knowledge and skills to make informed AT decisions. The team seeks help when needed.	(5) The team consistently uses collective knowledge and skills to make informed AT decisions. The team seeks help when needed.
3. IEP team uses a collaborative decision-making process based on data about the student, environments, and tasks to make determinations.	(1) No process is established for IEP teams to use to make AT decisions.	(2) A process is established for IEP teams to use to make AT decisions but it is not collaborative.	(3) A collaborative process is established but not generally used by IEP teams to make AT decisions.	(4) A collaborative process is established and generally used by IEP teams to make AT decisions.	(5) A collaborative process is established and consistently used by IEP teams to make AT decisions.
4. A continuum of assistive technology devices and services is explored.	(1) The team considers only one assistive technology device.	(2) The team only considers readily available technology.	(3) The team sometimes explores a continuum of AT devices and services but may not address all of the student's current needs (e.g. communication but not mobility)	(4) The team generally explores a continuum of assistive technology devices and services based on all of the student's current and near-future needs.	(5) The team consistently explores the full continuum of assistive technology devices and services based on current and near-future needs.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Consideration

Quality Indicator	Variations				
	UNACCEPTABLE				PROMISING PRACTICE
5. Decisions regarding the need for assistive technology devices and services are made based on access to the curriculum and the student's IEP goals and objectives.	(1) Decisions about a student's need for AT are not connected to IEP goals or the general curriculum.	(2) Decisions about a student's need for AT are based on either access to the curriculum/IEP goals or the general curriculum, not both.	(3) Decisions about a student's need for AT sometimes are based on both the student's IEP goals and general education curricular tasks.	(4) Decisions about a student's need for AT generally are based on both the student's IEP goals and general education curricular tasks.	(5) Decisions about a student's need for AT consistently are based on both the student's IEP goals and general education curricular tasks.
6. Decisions regarding the need for assistive technology devices and services and supporting data are documented.	(1) Documentation of consideration of a student's possible need for AT devices and services is not in the IEP.	(2) Documentation of consideration of a student's possible need for AT devices and services is inconsistent and may be limited to a "yes/no" check box.	(3) Documentation of consideration of a student's need for AT devices and services is only included if AT is needed.	(4) Documentation of consideration of a student's need for AT devices and services generally is included whether or not AT is needed.	(5) Documentation of consideration of a student's need for AT devices and services consistently is included whether or not AT is needed.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Assessment

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. Assistive technology assessment procedures are clearly defined and consistently used.	(1) No procedures are defined.	(2) Some assessment procedures are defined, but not generally used.	(3) Procedures are defined and used only by specialized personnel.	(4) Procedures are clearly defined and generally used in both special and general education.	(5) Clearly defined procedures are used by everyone involved in the assessment process.
2. Assistive technology assessments are conducted by a multidisciplinary team which actively involves the student and family or caregivers.	(1) A designated individual with no prior knowledge of the student's needs or technology conducts assessments.	(2) A designated person or group of individuals who have knowledge of technology, but not of the student's needs, environments, or tasks conducts assessments.	(3) A designated team conducts assessments with limited input from individuals who have knowledge of the student's needs, environments, tasks, and knowledge of assistive technology.	(4) A team whose members have direct knowledge of the student's needs, environments, tasks, and knowledge of assistive technology generally conducts assessments.	(5) A flexible team formed on the basis of knowledge or expertise in the areas of the individual student's needs, environments, tasks, and assistive technology conducts assessments.
3. Assistive technology assessments are conducted in the student's customary environments.	(1) No component of the AT assessment is conducted in any of the student's customary environments.	(2) No component of the AT assessment is conducted in any of the customary environments, however, data about the customary environments are sought.	(3) Functional components of AT assessments are sometimes conducted in the student's customary environments.	(4) Functional components of AT assessments are generally conducted in the student's customary environments.	(5) Functional components of AT assessments are consistently conducted in the student's customary environments.
4. Assistive technology assessments, including needed trials, are completed within reasonable time lines.	(1) AT assessments are not completed within agency timelines.	(2) AT assessments are frequently out of compliance with timelines.	(3) AT assessments are completed within a reasonable timeline and may or may not include initial trials.	(4) AT assessments are completed within a reasonable timeline and include at least initial trials.	(5) AT assessments are conducted in a timely manner and include a plan for ongoing assessment and trials in customary environments.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Assessment of Assistive Technology Needs

Quality Indicator	Variations				
	UNACCEPTABLE				PROMISING PRACTICE
	(6)		(7)	(8)	(9)
5. Recommendations from assistive technology assessments are based on data about the student, environments, and tasks.	(1) Recommendations are not data based.	(2) Recommendations are based on incomplete data from limited sources.	(3) Recommendations are sometimes based on data about student performance on typical tasks in customary environments.	(4) Recommendations are generally based on data about student performance on typical tasks in customary environments.	(5) Recommendations are consistently based on data about student performance on typical tasks in customary environments.
6. The assessment provides the IEP team with documented recommendations about assistive technology devices and services.	(1) Recommendations are not documented.	(2) Documented recommendations include only devices. Recommendations about services are not documented.	(3) Documented recommendations may or may not include sufficient information about devices and services to guide decision-making and program development.	(4) Documented recommendations generally include sufficient information about devices and services to guide decision-making and program development.	(5) Documented recommendations consistently include sufficient information about devices and services to guide decision-making and program development.
7. Assistive technology needs are reassessed by request or as needed based on changes in the student, environments, and/or tasks.	(1) AT needs are not reassessed.	(2) AT needs are only reassessed when requested. Reassessment is done formally and no on-going AT assessment takes place.	(3) AT needs are reassessed on an annual basis or upon request. Reassessment may include some on-going and formal assessment strategies.	(4) AT use is frequently monitored. AT needs are generally reassessed if current tools and strategies are ineffective. Reassessment generally includes on going assessment strategies and includes formal assessment, if indicated.	(5) AT use is continually monitored. AT needs are consistently reassessed if current tools and strategies are ineffective. Reassessment consistently includes on going assessment strategies and includes formal assessment, if indicated.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
AT in the IEP

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. The education agency has guidelines for documenting assistive technology needs in the IEP and everyone on the IEP team is aware of them.	(1) The agency does not have guidelines for documenting AT in the IEP.	(2) The agency has guidelines for documenting AT in the IEP but team members are not aware of them.	(3) The agency has guidelines for documenting AT in the IEP and members of some teams are aware of them.	(4) The agency has guidelines for documenting AT in the IEP and members of most teams are aware of them.	(5) The agency has guidelines for documenting AT in the IEP and members of all teams are aware of them.
2. Assistive technology is included in the IEP in a manner that provides a clear and complete description of the devices and services to be provided and used.	(1) Assistive Technology devices and services are not documented in the IEP.	(2) Some AT devices and services are minimally documented. Documentation does not include sufficient information to support effective implementation.	(3) Required AT devices and services are documented. Documentation sometimes includes sufficient information to support effective implementation.	(4) Required AT devices and services are documented. Documentation generally includes sufficient information to support effective implementation.	(5) Required AT devices and services are documented. Documentation consistently includes sufficient information to support effective implementation.
3. Assistive Technology is used as a tool to support achievement of IEP goals and objectives as well as participation and progress in the general curriculum.	(1) AT use is not linked to IEP goals and objectives or participation and progress in the general curriculum.	(2) AT use is sometimes linked to IEP goals and objectives but not linked to the general curriculum.	(3) AT use is linked to IEP goals and objectives and sometimes linked to the general curriculum.	(4) AT is linked to IEP goals and objectives and is generally linked to the general curriculum.	(5) AT is linked to the IEP goals and objectives and is consistently linked to the general curriculum.
4. IEP content regarding assistive technology use is written in language that describes measurable and observable outcomes.	(1) The IEP does not describe outcomes to be achieved through AT use.	(2) The IEP describes outcomes to be achieved through AT use, but they are not measurable.	(3) The IEP describes outcomes to be achieved through AT use, but only some are measurable.	(4) The IEP generally describes observable, measurable outcomes to be achieved through AT use.	(5) The IEP consistently describes observable, measurable outcomes to be achieved through AT use.
5. All services needed to implement assistive technology use are documented in the IEP.	(1) Services needed to support AT use are not documented.	(2) Some services are documented but they do not adequately support AT use.	(3) Services are documented and are sometime adequate to support AT use.	(4) Services are documented and are generally adequate to support AT use.	(5) Services are documented and are consistently adequate to support AT use.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Implementation

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. Assistive technology implementation proceeds according to a collaboratively developed plan.	(1) There is no implementation plan.	(2) Individual team members may develop AT implementation plans independently.	(3) Some team members collaborate in the development of an AT implementation plan.	(4) Most team members collaborate in the development of AT implementation plan.	(5) All team members collaborate in the development of an comprehensive AT implementation plan.
2. Assistive technology is integrated into the curriculum and daily activities of the student.	(1) AT included in the IEP is rarely used.	(2) AT is used in isolation with no links to the student's curriculum and/or daily activities.	(3) AT is sometimes integrated into the student's curriculum and daily activities.	(4) AT is generally integrated into the student's curriculum and daily activities.	(5) AT is fully integrated into the student's curriculum and daily activities.
3. Team members in all of the student's environments share responsibility for implementation of the plan.	(1) Responsibility for implementation is not accepted by any team member.	(2) Responsibility for implementation is assigned to one team member.	(3) Responsibility for implementation is shared by some team members in some environments.	(4) Responsibility for implementation is generally shared by most team members in most environments.	(5) Responsibility for implementation is consistently shared among team members across all environments.
4. The student uses multiple strategies to accomplish tasks and the use of assistive technology may be included in those strategies.	(1) No strategies are provided to support the accomplishment of tasks.	(2) Only one strategy is provided to support the accomplishment of tasks.	(3) Multiple strategies are provided. Students are sometimes encouraged to select and use the most appropriate strategy for each task.	(4) Multiple strategies are provided. Students are generally encouraged to select and use the most appropriate strategy for each task.	(5) Multiple strategies are provided. Students are consistently encouraged to select and use the most appropriate strategy for each task.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Implementation

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
5. Training for student, family, and staff is an integral part of implementation.	(1) AT training needs have not been determined.	(2) AT training needs are initially identified for student, family, and staff, but no training has been provided.	(3) Initial AT training is sometimes provided to student, family, and staff.	(4) Initial and follow-up AT training is generally provided to student, family, and staff.	(5) On-going AT training is provided to student, family, and staff as needed, based on changing needs.
6. Assistive technology implementation is initially based on assessment data and is adjusted based on performance data.	(1) AT implementation is based on equipment availability and limited knowledge of team members, not on student data.	(2) AT implementation is loosely based on initial assessment data and rarely adjusted.	(3) AT implementation is based on initial assessment data and is sometimes adjusted as needed based on student progress.	(4) AT implementation is based on initial assessment data and is generally adjusted as needed based on student progress.	(5) AT implementation is based on initial assessment data and is consistently adjusted as needed based on student progress.
7. Assistive technology implementation includes management and maintenance of equipment and materials.	(1) Equipment and materials are not managed or maintained. Students rarely have access to the equipment and materials they require.	(2) Equipment and materials are managed and maintained on a crisis basis. Students frequently do not have access to the equipment and materials they require.	(3) Equipment and materials are managed and maintained so that students sometimes have access to the equipment and materials they require.	(4) Equipment and materials are managed and maintained so that students generally have access to the equipment and materials they require.	(5) Equipment and materials are effectively managed and maintained so that students consistently have access to the equipment and materials they require.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Evaluation of Effectiveness

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
1. Team members share clearly defined responsibilities to ensure that data are collected, evaluated, and interpreted by capable and credible team members.	(1) Responsibilities for data collection, evaluation, or interpretation are not defined.	(2) Responsibilities for data collection, evaluation, or interpretation of data are assigned to one team member.	(3) Responsibilities for collection, evaluation and interpretation of data are shared by some team members.	(4) Responsibilities for collection, evaluation and interpretation of data are shared by most team members.	(5) Responsibilities for collection, evaluation and interpretation of data are consistently shared by team members.
2. Data are collected on specific student behaviors that have been identified by the team and are related to one or more goals.	(1) Team neither identifies specific changes in student behaviors expected from AT use nor collects data.	(2) Team identifies student behaviors and collects data, but the behaviors are either not specific or not related to IEP goal(s).	(3) Team identifies specific student behaviors related to IEP goals, but inconsistently collects data.	(4) Team identifies specific student behaviors related to IEP goals, and generally collects data.	(5) Team identifies specific student behaviors related to IEP goals, and consistently collects data on changes in those behaviors.
3. Evaluation of effectiveness reflects the objective measurement of changes in the student's performance (e.g. student preferences, productivity, participation, independence, quantity, quality, speed, accuracy, frequency, or spontaneity).	(1) Effectiveness is not evaluated.	(2) Evaluation of effectiveness is based on something other than student performance, such as changes in staff behavior and/or environmental factors.	(3) Evaluation of effectiveness is based on subjective information about student performance.	(4) Evaluation of effectiveness is generally based on objective information about student performance from a few data sources.	(5) Evaluation of effectiveness is consistently based on objective information about student performance obtained from a variety of data sources.
4. Effectiveness is evaluated across environments including during naturally occurring opportunities as well as structured activities.	(1) Effectiveness is not evaluated in any environment.	(2) Effectiveness is evaluated only during structured opportunities in controlled environments (e.g. massed trials data).	(3) Effectiveness is evaluated during structured activities across environments and a few naturally occurring opportunities.	(4) Effectiveness is generally evaluated during naturally occurring opportunities and structured activities in multiple environments.	(5) Effectiveness is consistently evaluated during naturally occurring opportunities and structured activities in multiple environments.

Quality Indicators in Assistive Technology
Indicators in Action Matrix
Evaluation of Effectiveness

Quality Indicator	Variations				
	UNACCEPTABLE				**PROMISING PRACTICE**
5. Evaluation of effectiveness is a dynamic, responsive, ongoing process that is reviewed periodically.	(1) No process is used to evaluate effectiveness.	(2) Evaluation of effectiveness only takes place annually, but the team does not make program changes based on data.	(3) Evaluation of effectiveness only takes place annually and the team uses the data to make annual program changes.	(4) Evaluation of effectiveness takes place on an on-going basis and team generally uses the data to make program changes.	(5) Evaluation of effectiveness takes place on an on-going basis and the team consistently uses the data to make program changes.
6. Data collected provides a means to analyze response patterns and student performance.	(1) No data are collected.	(2) Data are collected on staff behavior or environmental factors, rather than student performance.	(3) Data are collected on student performance, but data are not sufficient to allow necessary analysis.	(4) Data are collected on student performance, and are generally sufficient to allow necessary analysis.	(5) Data are collected on student performance, and are consistently sufficient to allow necessary analysis.
7. The team makes changes in the student's educational program based on data.	(1) Program changes are never made.	(2) Program changes are made in the absence of data.	(3) Program changes are loosely linked to student performance data.	(4) Program changes are generally linked to student performance data.	(5) Program changes are consistently linked to student performance data.